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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,948	12/05/2001	Kurtis Paul Longnecker	AUS920010641US1	7801

35525 7590 05/02/2005

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ART UNIT PAPER NUMBER

2125

DATE MAILED: 05/02/2005

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/004,948
Filing Date: December 05, 2001
Appellant(s): LONGNECKER ET AL.

MAILED

MAY 02 2005

Technology Center 2100

Betty Formby
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed February 16, 2005.

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments*

The appellant's statement of the status of amendments contained in the brief is substantially correct. However, for purposes of avoiding an issue under 101, claim 8, line 1 has been amended to delete "computer readable media" and instead insert - - recorded media - -.

(5) *Summary of Claimed Subject Matter*

The summary of the claimed subject matter contained in the brief is correct.

(6) *Grounds of Rejection to be Reviewed on Appeal*

The following ground(s) of rejection are applicable to the appealed claims:

The rejection has been reproduced below for convenience.

DETAILED ACTION

Final Rejection

1. Claims 3-4, 10-11, 17-18 and 24-25 have been cancelled.

Claim 1-2, 5-9, 12-16, 19-23, 26-36 are remained for consideration.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 5, 7, 8-9, 12, 14, 15-16, 19, 21, 22-23 and 26, 28 are rejected under 35 U.S.C. 102(e) as anticipated by **O'Sullivan et al. (2003/0065758)** or, in the alternative, under 35 U.S.C. 103(a) as obvious over **O'Sullivan et al.** in view of **Flansburg et al (US 6,393,432)**.

Regarding Claims 1, 8, 15 and 22 **O'Sullivan** discloses a method, a computer program product and a system for producing a drawing of components and connections needed to implement a desired system, comprising:

- receiving user needs of the desired system, wherein the user needs describe specified capabilities and performance requirements of the desired system and do not provide schematic details for the desired system, and wherein the desired system is a computer network; (Page 2, [0027] lines 1-13; [0025], lines 4-6; [0024]); automatically determining components and connections needed to implement a system that satisfies the user needs based on the specified capabilities and performance requirements of the desired system and application of one or more system design rules to the specified capabilities and performance requirements of the desired system; (Page 2, [0030]; [0032] – [0033]); generating a drawing program input that provides instructions for producing a drawing of the system that satisfies the user needs using the determined components and connections to produce schematic details for the system (Fig. 2); and sending the drawing program input to a drawing program to generate a graphical output of the schematic details for the system (Fig. 2; [0028]).

O'Sullivan discloses a method for designing network interconnect fabric and interconnection modules that is adaptable to be used as a computer-aided design tool for networks (Page 1, [0009], lines 1-3; Page 2, [0028], please note that any computer-aided design tool would include a drawing program). However, **O'Sullivan** does not *specifically* disclose a drawing program. But **Flansburg** discloses a drawing program

used in network designs (Col. 5, lines 9-11 and lines 18-21; Col. 2, lines 10-18).

Therefore, it would have been obvious to a person of the ordinary skill in the art at the time the invention was made to combine the method for designing a network of **O'Sullivan** with the method of **Flansburg** because it would provide an improved system wherein the user is allowed to create, edit, store and distribute graphical diagrams of logical network layouts (Abstract, lines 8-10).

As for claims 2, 5, 7, 9, 12, 14, 16, 19, 21, 23 and 26, 28 **O'Sullivan** further discloses:

- providing at least one graphical user interface for receiving the user needs of the desired system (Fig. 1, element 105);
- generating, with the drawing program, the drawing of the desired system (Fig. 2);
- determining components and connections needed to implement the system that satisfies the user needs comprises referencing a set of policies that must be satisfied in order for the desired system to function properly (Page 5, [0055]).

As for claims 29-30, 31-32, 33-34, and 35-36, **O'Sullivan** discloses:

- the specified capabilities and performance requirements of the desired system comprise at least one of a *computer network design type*, customer information, geographic load balancing information, firewall configuration information, network connectivity information, server configuration information, application configuration information, database configuration information, data backup capacity information, load balancing information, and an environment type (Fig. 2; Fig. 10; Page 1, [0009]; [0023]);

- determining an estimated cost to implement the system; and presenting a budget and planning estimate to a user based on the estimated cost (Page 4, [0047] [0048], line15 to [0049]; Fig. 6, steps 620 -630).

3. Claims 6, 13, 20 and 27 rejected under 35 U.S.C. 103(a) as being unpatentable over **O'Sullivan et al. (2003/0065758)**.

As for claims 6, 13, 20 and 27, **O'Sullivan** discloses the limitations of claims 1, 8, 15 and 22. **O'Sullivan** does not disclose that the system is to implement a web hosting. However, **O'Sullivan** discloses that his invention is applicable to any network that comprises source nodes and target nodes connected by a number of communication links (Page 2, [0023], lines 3-6). Therefore, it would have been obvious to a person of the ordinary skill in the art at the time the invention was made to use the method for designing any network of **O'Sullivan** and implement such method for a web hosting because it would provide an automated method for designing networks that develops cost-effective design of interconnection fabrics by seeking low cost while simultaneously satisfying network performance requirements (Page 1, [0008]).

(7) Response to Argument

First, as a point of clarification, appellants' interpretation of the form of the rejection is correct. The rejection of the claims is a rejection under 35 USC 102 based upon O'Sullivan with an alternative rejection under 35 USC 103 based upon O'Sullivan in view of Flansburg. Any confusion is regretted.

Appellants set forth two arguments on Page 9 of the brief: 1) O'Sullivan does not receive the requirements for an entire computer network; and 2) O'Sullivan does not show generating and sending information to a drawing program, either internal or external, as recited in the generating and sending steps. These arguments will be addressed below in order.

1) The appellants argue, on Page 13 of the Brief, that O'Sullivan does not receive the requirements for an entire computer network, underlining added for emphasis. O'Sullivan discloses receiving the requirements for a computer network (Page 2, [0027], lines 1-13, i.e., in a Storage Area Network (SAN) fabric design problem, a designer is given a set of required flows... The objective of the design problem is to design a fabric consisting of these components which meets the flow requirements at the minimum cost; [0025], lines 4-6; [0024]). It is submitted that O'Sullivan does receive the requirements for a computer network. It should be noted that the word "entire" as put forth in appellants' argument is not contained within the claims.

Assuming that the word "entire" can be read into the claims, it is submitted that O'Sullivan does disclose receiving the "entire" computer network. O'Sullivan does teach that the source nodes and terminal nodes are given. However, without the source node and terminal nodes no network could be created. Appellants reference "Webopedia" as defining a computer network as "a group of two or more computer systems linked together". The fact that two or more computers are present does not determine a

network, it is the connections between the devices that are most relevant and the source node and terminal nodes will always have to be specified.

O'Sullivan discloses that "modules, which are appropriate combinations of direct links, hubs and switches, are built to support each port group, 240. Typically, costs are lowest for direct links, higher for hubs, and higher yet for switches. The module design segment attempts to build modules by selecting the lowest-cost module for each port group. That means it will attempt to meet flow requirements with the least-cost module" (O'Sullivan, [0030]).

2) The appellants further argue that "O'Sullivan does not generate and send information to a drawing program". Examiner disagrees, because O'Sullivan discloses that Fig. 2 is a simplified schematic diagram overview of an overall process implemented by his invention (Page 2, [0030], lines 1-3, please note that Fig. 2 shows drawings of how the devices are interconnected with the hosts). O'Sullivan further discloses that his invention is intended to be operated in an automated environment and it is specially adaptable to be used as a computer-aided design tool for networks (Page 2, [0028], it is submitted that computer-aided design tools inherently include a drawing program).

Inherency was the basis under which the rejection using O'Sullivan as a 35 USC 102 reference was made. Appellants appear to challenge this in the brief at page 13 "It is submitted that the rulings cited from the Federal Circuit would specifically preclude the use of what is generally known about design tools in favor of what is explicitly

disclosed ..." (underlining in the original). It is submitted that O'Sullivan inherently includes a drawing program since it includes a computer-aided design tool (CAD). It should be noted that while the word inherent was not used in the rejection, it was implied and the rejection could not have been interpreted any differently.

Further in response to appellants argument that O'Sullivan does not inherently disclose a drawing program, the reference of Flansburg is cited as evidence that CAD programs inherently include drawing programs. The rejection under section 102 is not based upon the examiner's knowledge in general, but upon the facts and evidence of record.

Appellants' argument with regards to the implementation of a drawing program on Page 13 of the brief is not understood. The implementation of the drawing program would, with all due respect, appear to be irrelevant to the present invention since the preferred drawing program is "Visio", a product of the Microsoft Corporation. How the drawing program performs its functions does not appear to be appellants' invention.

Claims 1, 2, 5, 7-9, 12, 14-16, 19, 21-23, 26 and 28 were alternatively rejected under 35 USC 103 as being unpatentable over O'Sullivan in view of Flansburg. While the rejection may be rewritten to be clearer, the point to be conveyed is the point understood by Appellants – If in the alternative it is believed that O'Sullivan does not disclose a drawing program then reference should be made to Flansburg which teaches this limitation. On page 15 of the brief, Appellants state "It is submitted that the discussion above pointed out three steps that O'Sullivan did not meet." This has been

interpreted as the last sentence of the first paragraph on page 15. The three steps Appellants are arguing for are: 1) Flansburg does not show how information regarding the requirements for a computer network is gathered; 2) How the information to produce a drawing of the proposed computer network is collected; and 3) How the information is sent to the drawing program.

1) It is agreed that Flansburg does not show how information regarding the gathering of requirements for the computer network is performed. However, O'Sullivan does disclose this feature. Flansburg is cited to show a drawing program.

2) and 3) The claims have been reviewed and no support can be found in the claims for how the information to produce the drawings is collected nor how the information is sent to the drawing program. Whether Flansburg discloses these steps, with all due respect, is irrelevant since the claims do not contain these limitations.

On page 15 of the brief, with respect to claims 5, 12, 19 and 26, appellants argue that the reference of O'Sullivan does not show the generation of a drawing. It is submitted that O'Sullivan shows a CAD program which inherently includes a drawing program. If O'Sullivan is believed by the Board of Patent Appeals and Interferences to show a drawing program, then it is submitted that the creation of a drawing is part and parcel of a drawing program. To have a drawing program that could not produce a drawing is an argument for inoperability without any evidence.

Further, it appears that appellants have skipped the combination of O'Sullivan in view of Flansburg with respect to claims 5, 12, 19 and 26. Even if it is considered that O'Sullivan's CAD program does not include a drawing program, the reference of

Flansburg is offered as a modifying reference for O'Sullivan. Flansburg teaches the use of a drawing program that would allow a user to create, edit, store, and distribute graphical diagrams of logical networks layouts. Therefore, if the rejection under 35 USC 102 using O'Sullivan is reversed, the combination of O'Sullivan and Flansburg is considered to make the present invention obvious.

Lastly, the appellants argue, on Page 16 of the Brief, that neither O'Sullivan nor Flansburg disclose referencing a set of policies that must be satisfied. The examiner disagrees, O'Sullivan discloses this limitation. While the word "policy" is not used in O'Sullivan, the phrase feasibility test is used. It is considered that the feasibility test is the same as a policy (Page 5, [0055]-[0056], i.e., a feasibility test is implemented for each switch port; [0058], i.e, The feasible external port with the highest merit score is connected to the switch port identified by the first step of the feasibility test). The fact that connections are scored and ranked for selection is a policy or hence a method of selection.

With respect to claims 6, 13, 20 and 27, these claims are considered to stand or fall with the independent claims as stated by appellants.

For the above reasons, it is believed that the rejections should be sustained.

Application/Control Number: 10/004,948
Art Unit: 2125

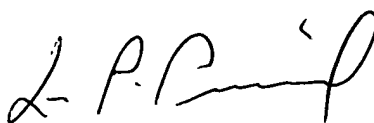
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Respectfully submitted,

Zoila Cabrera
Patent Examiner
Art Unit 2125
April 28, 2005

Conferees

Leo Picard
Supervisory Patent Examiner



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EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Betty Formby on April 26, 2005.

The application has been amended as follows:

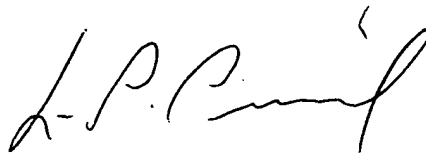
Claim 8, line 1, delete "computer readable media" and instead insert - - recorded media - -.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zoila E. Cabrera whose telephone number is 571-272-3738. The examiner can normally be reached on M-F 8:00 AM to 5:30 PM EST (every other Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571-272-3749. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Zoila Cabrera
Patent Examiner
Art Unit 2125

A handwritten signature in black ink, appearing to read 'L. Picard', with a stylized flourish at the end.

LEO PICARD
SUPERVISORY PATENT EXAMINER
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